

Amendments to the claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-11 (canceled).

12 (currently amended): Process for treating lameness caused by osteoarthritis, in a non-human animal suffering from osteoarthritis and not suffering from fractures, comprising the administration, to ~~a~~ the non-human animal ~~not suffering from fractures~~, of an effective amount of a bisphosphonic acid derivative selected from the group consisting of:

- 1-hydroxyethylidenebisphosphonic acid and its sodium salts;
- 2-pyrid-2-ylethylidenebisphosphonic acid and its sodium salts;
- phenoxymethylenebisphosphonic acid and its salts;
- thiomorpholinomethylenebisphosphonic acid and its salts;
- 4-chlorophenylthiomethylenebisphosphonic acid and its salts;
- 1-hydroxy-2-(3-pyridyl)ethylidenebisphosphonic acid and its sodium salts;
- 1-hydroxy-2-(2-imidazolyl)ethyl-1,1-bisphosphonic acid and its salts; and
- 2-hydroxyethylidene-2-(3-pyridyl)-1,1-bisphosphonic acid and its sodium salts.

- 13 (previously presented): Process according to claim 12, for treating an animal belonging to the equidae family.
- 14 (previously presented): Process according to claim 12, for treating a horse.
- 15 (currently amended): Process according to claim 12, comprising the administration of 0.001 ~~mg/kg~~ mg/kg to 100 mg/kg of body weight of the bisphosphonic acid derivative.
- 16 (previously presented): Process according to claim 12, for treating limps in horses, comprising the intravenous administration of 0.01 mg/kg/week to 1 mg/kg/week of tiludronic acid or one of its pharmaceutically acceptable salts.
- 17 (previously presented): Process according to claim 12, comprising the oral administration of the bisphosphonic acid derivative.
- 18 (previously presented): Process according to claim 12, comprising the parenteral administration of the bisphosphonic acid derivative.
- 19 (previously presented): Process according to claim 12, comprising the administration of the bisphosphonic acid derivative in the form of an implant.

- 20 (previously presented): Process according to claim 12, in which the bisphosphonic acid derivative is 4-chlorophenylthiomethylenebisphosphonic acid.
- 21 (currently amended): Process for treating lameness caused by osteoarthritis, in a horse suffering from osteoarthritis and not suffering from fractures, comprising the administration, to ~~a~~ the horse ~~not suffering from fractures~~, of an effective amount of 4-chlorophenylthiomethylenebisphosphonic acid or its sodium salt.